

ABSTRACT OF THE DISCLOSURE

A multimedia processing system and methods provide flexibility and modularity by separating data flow information from maintaining of stream state for multimedia components. The system includes a media processor component to process received media data, a media session to determine a timeline for events to occur for performing media processing and a topology loader component to load a topology that describes a flow for the received media data to enable processing via an extensible symbolic abstraction of media objects. The topology loader ensures that events described in the topology occur. The system also includes core layer components such as media sink components to determine a media stream for output from the multimedia processing system and a media source component coupled to supply media data for processing. The topology created in the system symbolically provides data flow information, independent of maintaining a streaming state of control information.